

7 core wire without applying any force by said ^{tip portion} distal tip to any surface within said
8 body cavity,

9 wherein said elongate tip portion is a segment adapted to be disposed in
10 said cavity and having a plurality of filaments extending therefrom to substantially
11 pack said cavity when disposed therein, whereby occlusion of said cavity can be
12 performed.

Remarks

Claims 1 - 24 were original in the application and have been canceled without prejudice. Claims 25 - 34 were added as better defining the invention. Claims 25, 29, 30, and 34 have been amended. Examination of Claims 25 - 34 as amended on the merits is requested.

The Examiner has objected to claims 29 and 33 on a number of particulars under 35 USC 112, which in each case has been responsively amended with thanks for the review provided.

Rejection Under 35 USC 102(b)

Claims 25, 26, 28, 30 and 31 were rejected as anticipated by **Anderson**. **Anderson** shows an mechanism for unscrewing a coil from a guidewire tip. **Anderson** was earlier disclosed in the immediate parent application, but is again specifically mentioned to emphasize that **Anderson** is distinguished in the invention by a coupling means that allows the coils to be detached from the

guidewire without displacement of the coil or assertion of any force thereon, i.e. a forceless letting go.

Claim 25 as amended claims a method for forming an occlusion within a body cavity which includes the step of detaching the distal tip from the wire to leave the distal tip within the cavity without applying any force by the distal tip to any surface within the body cavity.

Anderson unscrews the tip from the wire to back the wire out of the coil which is then left in the cavity. This applies a longitudinal reactive force from the catheter or wire as it is back out, which can be considerable given the long and often tortuous disposition of the catheter and wire in the vessel or narrow body lumen to access the cavity or aneurysm. In addition, even if there were no longitudinal reactive force from the catheter or wire, the simple act of unscrewing the catheter means that the distal coil must be held by frictional engagement with a surface of the body cavity to resist the turning of the coil, otherwise the coil will not unscrew from the catheter wire. With the soap bubble thin aneurysms encountered in the brain, such a torque applied to a surface of the aneurysm creates a substantial risk of rupture and resulting brain hemorrhage and stroke.

Similar amendments have been made to claims 29, 30, and 34 to distinguish over **Anderson**.

Rejection Under 35 USC 103(a)

Claims 27 and 32 were rejected as obvious over **Anderson**. The use of markers on the catheter was regarded as an expedient of the art.

Anderson show no markers. Presumably the wire and coil of **Anderson** were radioopaque enough to be observed under fluoroscopy during use. This is not necessarily the case with the invention were extremely fine wire and coils are used in the very small vessels of the brain. The delicacy of the operation and

the criticality of the placement of the coil, requires that the position of the end of the catheter at the time of the beginning of the delivery of the coil and at the position of the wire at the full deployment of the coil in the aneurysm must be known precisely. Between these two times, the catheter cannot be moved without risk to the success of the operation. The end marker of the catheter allows the end of the catheter and its placement at the opening of the aneurysm and its stationary position during coil placement to be monitored and maintained. The marker on the wire and the second proximal marker on the catheter allows a clear fluoroscopic visualization of a predetermined longitudinal displacement of the wire from through the catheter to the extent that just the separable coil tip is extended out of the catheter tip and implanted into the aneurysm. By this means insertion of the wire or any part of it into the aneurysm can be avoided. Since the rigidity or mechanical characteristics of the wire may be somewhat different from that of the coil tip, this has the added benefit of more closely controlling the forces applied to the aneurysm by controlling the elements which are extended into or near the aneurysm.

Claims 29 and 34 were rejected as obvious over **Anderson** in view of **Chee**. Claims 29 and 34 have been distinguished over **Anderson** as described above.

A terminal disclaimer over U.S. Patent 5,540,680 is signed and included.

The Examiner objected to the claims under *In Re Schneller*, 158 USPQ 210 (CCPA 1968) on the ground that there is no apparent reason why applicant was prevented from presenting the claims during an earlier application which has matured into an issued patent.

In Re Schneller was an appeal is from a decision of the Patent Office Board of Appeals affirming the examiner's rejection of claims on the ground of double patenting over an issued copending patent to the same applicant. Unlike the present case, there was no terminal disclaimer offered in *In Re Schneller*.

The CCPA held that:

"The controlling fact is that patent protection for the clips, fully disclosed in and covered by the claims of the patent, would be extended by allowance of the appealed claims. Under the circumstance of the instant case, wherein we find no valid excuse or mitigating circumstances making it either reasonable or equitable to make an exception, and wherein there is no terminal disclaimer, the rule against "double patenting" must be applied. " 158 USPQ at 214.

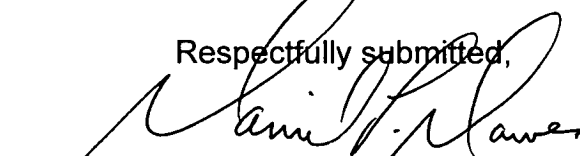
The applicant in *In Re Schneller* was attempting to extend the original patent by asserting that the application in question was an independent and distinct invention. This is not the case here, where any extension of U.S. Patent 5,540,680 is expressly disclaimed. Thus, *In Re Schneller* is distinguished from the present application.

The cross-reference to all prior applications has been added.

The information disclosure statement referenced in the request for filing is enclosed and includes references which were part of the file history of the immediate parent '795 application.

Advancement of the claims to issuance is respectfully requested.

Respectfully submitted,



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